

REMARKS

I. Status of the Claims and the Rejections

Claims 1-9, 11, 13, 15 and 16 were objected to for alleged informalities. More specifically, the claims were objected to for including a redundant acronym, for using the word "a" instead of the word "the" at the beginning of dependent claims, and for an allegedly unclear preamble of claim 1. Applicants have amended claims 1-9, 11, 13, 15 and 16 to remove the allegedly unclear language and in accordance with the suggestions offered in the Office Action. For at least these reasons, applicants respectfully request that the objections to the claims be withdrawn.

Claims 1-9, 11, 13, 15 and 16 were also rejected under 35 U.S.C. § 112, second paragraph, for alleged indefiniteness. These rejections were based on allegedly unclear language in the preamble of claim 1 (which has been removed as discussed above), the use of "a National Advisory Committee for Aeronautics air inlet" in claim 2, and the use of "by means of" in claim 16. Applicants have amended claims 1 and 16 to remove the allegedly unclear language. With respect to claim 2, applicants observe that a National Advisory Committee for Aeronautics air inlet is also known in the art to be a NACA-compliant air inlet originally designed in 1945 (*see* http://en.wikipedia.org/wiki/NACA_duct). One of ordinary skill in the art would readily appreciate the type of air inlet that claim 2 recites. Applicants therefore request that the Section 112 rejections of claims 1-9, 11, 13, 15 and 16 be withdrawn.

Substantively, claims 1, 3-9, 11, 13 and 15-17 were rejected for alleged lack of novelty under 35 U.S.C. § 102(e) based on Brutscher U.S. Patent Application Publication No. 2003/0177780 ("Brutscher"). Claim 2 was rejected for alleged obviousness under 35 U.S.C.

§ 103(a) based on Brutscher in view of Scherer U.S Patent No. 6,293,494 ("Scherer").

Applicants respectfully traverse these rejections.

Nonetheless, applicants have amended independent claims 1 and 17 to further clarify the subject matter regarded as patentable. Applicants have also amended claims 2-9, 11, 13, 15 and 16 in this response. In view of these amendments and the following remarks, applicants respectfully request reconsideration and allowance.

II. Claims 1, 3-9, 11, 13 and 15-17 are Novel

A. The Claims

Independent claim 1 is directed to a cooling air supply system configured to supply cooling air from the surroundings of an aircraft to at least two devices requiring cooling air within the aircraft. The cooling air system includes an air inlet, an air channel communicating with the air inlet, and an air distribution device for distributing air from the air channel to the at least two devices requiring cooling air. The air distribution device is located downstream from the air channel and upstream from the at least two devices requiring cooling air. The cooling air system also includes "at least one shutter disposed in the air distribution device and configured to throttle the distribution of air from the air channel to the at least two devices requiring cooling air." The air inlet is sized to provide sufficient air flow to accommodate a maximum cooling air requirement of the at least two devices.

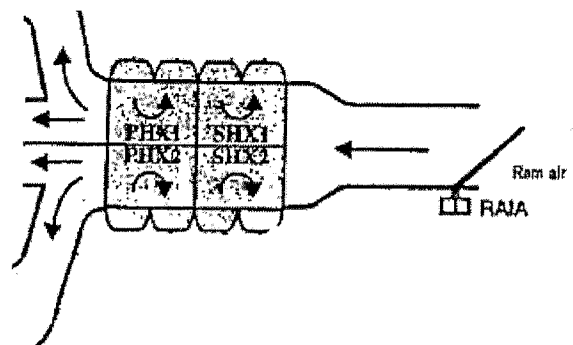
Each of claims 3-9, 11, 13, 15 and 16 depends from independent claim 1 and recites additional features of the cooling air supply system. For example, claim 16 further recites that the at least two devices requiring cooling air are connected with a common cooling air outlet

by expelled air pipes. Independent claim 17 is directed to an aircraft including a cooling air supply system corresponding substantially to the supply system recited in independent claim 1.

B. The Deficiencies of the Cited Prior Art

Brutscher discloses an air conditioning system for an aircraft. As shown in FIG. 3, the air conditioning system includes a pair of parallel heat exchanger units (SHX 1, PHX 1, SHX 2, PHX 2) fed by a common ram air inlet (RAIA). The incoming air passes through the heat exchanger units, a compressor (C), and a water separation system (REH-CON WE) before being directed into a passenger cabin air supply. *See* paragraph [0062]. The parallel heat exchanger units and cooling circuits of the air conditioning system are provided for the primary purpose of redundancy in case of failure. *See* paragraph [0002]. The Office Action states that the heat exchanger units of Brutscher correspond to the "two devices requiring cooling air" recited in claims 1 and 17 and the flap at the common ram air inlet corresponds to the "at least one shutter" recited in claims 1 and 17. Applicants respectfully disagree.

The currently claimed cooling air supply system requires that a shutter be positioned in an air distribution device located "downstream from the air channel [fed by the air inlet] and upstream from the at least two devices requiring cooling air." In contrast, the relevant



portion of Figure 3 in Brutscher is shown at right, with the ram inlet flap and the heat exchanger units. As clearly shown in that partial reproduction of Figure 3, the alleged "two devices requiring cooling air" are directly connected to the ram inlet flap by a short individual duct.

Brutscher does not show any structure that may be considered the air distribution device recited in independent claims 1 and 17.

Thus, independent claims 1 and 17 are allowable over Brutscher. Each of dependent claims 3-9, 11, 13, 15 and 16 depends from independent claim 1 and includes one or more additional features in combination with the features of claim 1. For substantially the same reasons set forth above with respect to claim 1, and further because Brutscher fails to teach or suggest the subject matter recited in the claims, applicants respectfully submit that each of claims 3-9, 11, 13, 15 and 16 is also allowable. Applicants respectfully request that the rejection of claims 1, 3-9, 11, 13 and 15-17 be withdrawn, and that these claims be allowed.

III. Claim 2 is Not Obvious

A. The Claim

Claim 2 depends from independent claim 1, which is directed to a cooling air supply system for an aircraft as described previously. Claim 2 further requires that the air inlet is a National Advisory Committee for Aeronautics air inlet in the outer skin of the aircraft.

B. The Deficiencies of the Cited Prior Art

As discussed above, Brutscher is directed to an air conditioning system for a compartment of an aircraft. However, Brutscher fails to disclose a shutter disposed in an air distribution device. Scherer is directed to an aircraft air inlet for any purpose and is only cited for the teaching of a NACA-compliant air inlet. Scherer also fails to teach or suggest a shutter disposed in an air distribution device for delivering air to at least two devices requiring cooling air.

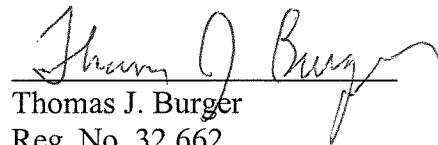
For at least these reasons, claim 2 is allowable over the cited combination of references. Applicants respectfully request that the rejection of claim 2 be withdrawn and the claim allowed.

IV. Conclusion

Based on the amendments to the claims and these remarks, applicants respectfully assert that all present claims are in condition for allowance, and respectfully request an allowance without further delay.

Applicants believe that no fee is due for this filing. But if the USPTO disagrees, please consider this as an authorization to charge Deposit Account 23-3000.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Thomas J. Burger", is written over a horizontal line.

Thomas J. Burger
Reg. No. 32,662
WOOD, HERRON & EVANS, L.L.P.
2700 Carew Tower
441 Vine Street
Cincinnati, Ohio 45202
Telephone: (513) 241-2324
Facsimile: (513) 241-6234